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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/990,121	11/21/2001	Eugene Yan Ki Hsue	M-12154 US	2802
32566	7590	02/02/2004	EXAMINER	
PATENT LAW GROUP LLP 2635 NORTH FIRST STREET SUITE 223 SAN JOSE, CA 95134			LEA EDMONDS, LISA S	
			ART UNIT	PAPER NUMBER
			2835	

DATE MAILED: 02/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/990,121

Applicant(s)

HSUE ET AL.

Examiner

Lisa Lea-Edmonds

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 November 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 15-25 is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Specification

1. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: applicant's front wall midplane.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 7-17 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. In claims 7-17, recite a front wall midplane, however, applicant's specification (see line 13 of page 5) recites the first midplane sled 104 also includes a front wall, or midplane, 210 (sic). Is element 210 applicant's front wall or midplane or front wall midplane?

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 3 and 6, are rejected under 35 U.S.C. 103(a) as being unpatentable over Ferchau et al. (4899254) in view of Carteau (6459571). With respect to claims 1, 3, and 6, Ferchau et al. teaches an enclosure (2) comprising a chassis (4) having a floor and opposing sidewalls; a first midplane (14) having

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an opening formed therein; wherein the midplane (14) is operable to be secured in an interior of the chassis (4) between the sidewalls and oriented in orthogonal relationship to the sidewalls; wherein the midplane (14) is configured to mate to at least one air displacement unit (82) on a back surface of the midplane (14) parallel to the sidewalls of the chassis (4), and to mate to at least one device sled (10, 24) on a front surface of the midplane (14); wherein each opening is aligned with at least one of the air displacement units (82) as claimed (see for example figures 2A and 2B). However, the apparatus of Ferchau et al. lacks a clear teaching of the midplane (14) being a discrete first and second midplane, a shelf being disposed on at least one of the sidewalls, and a controller mounted on the shelf and connected to the midplane as claimed. Carteau is relied upon for its teaching of a chassis (20) having discrete first and second midplane (25A, 25B), a shelf (30A, 30B) being disposed on at least one of the sidewalls, and a controller (29) mounted on the shelf (30A, 30B) and connected to the midplane (25A, 25B) as claimed. It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Carteau into the apparatus of Ferchau et al. to aid in repairing a defective midplane without having to take the system "offline", thus improving redundancy.

6. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ferchau et al. in view of Carteau as applied to claim 1 above, and further in view of Manweiler et al. (6459589). With respect to claim 2, Ferchau et al. in view of Carteau teaches an enclosure (2) comprising a chassis (4) having a floor and opposing sidewalls; discrete first and second midplane (see Carteau) having an opening formed therein; wherein the midplane is operable to be secured in an interior of the chassis between the sidewalls and oriented in orthogonal relationship to the sidewalls; wherein the midplane is configured to mate to at least one air displacement unit (82) on a back surface of the midplane parallel to the sidewalls of the chassis, and to mate to at least one device sled (10, 24) on a front surface of the midplane; wherein each opening is aligned with at least one of the air displacement units (82); and a shelf (30A, 30B) being disposed on at least one of the sidewalls, and a controller (29) mounted on the shelf (30A, 30B) and connected to the midplane (see Carteau) as claimed (see for example figures 2A, 2B of Ferchau et al. and figures 5, 6 of Carteau). However, the apparatus of Ferchau et al. in view of Carteau lacks a clear teaching of a divider wall as claimed. Manweiler et al. is relied upon for its teaching of a divider wall (50)

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being disposed on the floor of a chassis (10). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Manweiler et al. into the apparatus of Ferchau et al. in view of Carteau to further divide the chassis.

7. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ferchau et al. in view of Carteau as applied to claim 1 above, and further in view of Dean et al. (3905484). With respect to claim 4, Ferchau et al. in view of Carteau teaches an enclosure (2) comprising a chassis (4) having a floor and opposing sidewalls; discrete first and second midplane (see Carteau) having an opening formed therein; wherein the midplane is operable to be secured in an interior of the chassis between the sidewalls and oriented in orthogonal relationship to the sidewalls; wherein the midplane is configured to mate to at least one air displacement unit (82) on a back surface of the midplane parallel to the sidewalls of the chassis, and to mate to at least one device sled (10, 24) on a front surface of the midplane; wherein each opening is aligned with at least one of the air displacement units (82); and a shelf (30A, 30B) being disposed on at least one of the sidewalls, and a controller (29) mounted on the shelf (30A, 30B) and connected to the midplane (see Carteau) as claimed (see for example figures 2A, 2B of Ferchau et al. and figures 5, 6 of Carteau). However, the apparatus of Ferchau et al. in view of Carteau lacks a clear teaching of the enclosure further comprising tabs extending from the front surface of each midplane and slots formed in the chassis as claimed. Dean et al. is relied upon for its teaching of tabs (40A, 40B, 42) extending from the front surface of each midplane (38) and slots (30A 30B, 20) formed in the chassis as claimed. It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Dean et al. into the apparatus of Ferchau et al. in view of Carteau to further aid in supporting the midplanes.

8. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ferchau et al. in view of Carteau as applied to claim 1 above, and further in view of Hipp et al. (6411506). With respect to claim 5, Ferchau et al. in view of Carteau teaches the invention as claimed by claim 1 (see the above 103 rejection). However, the apparatus of Ferchau et al. in view of Carteau lacks a clear teaching of each device sled (10) comprising multiple discrete data storage mediums as claimed. Hipp et al. is relied upon for its teaching of each device sled (32) comprising multiple discrete data storage mediums (86, 87) as

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claimed. It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Hipp et al. into the apparatus of Ferchau et al. in view of Carteau to increase user memory.

Allowable Subject Matter

9. Claims 15-25 are allowed.

10. The following is an examiner's statement of reasons for allowance: with respect to claims 15-20, patentability resides, at least in part, in the chassis comprising a divider wall running the length of the floor, in combination with the other limitations of the claims; with respect to claims 21-25, patentability resides, at least in part, in the disk enclosure comprising an air displacement unit comprising a first fan adjacent to a front surface of the air displacement unit, a power source, and a second fan adjacent to a rear surface of the air displacement unit, in combination with the other limitations of the claims.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Response to Arguments

11. In response to applicant's argument that Carteau does not disclose or suggest, and in fact teaches away from, 'discrete first and second midplanes ... orientated in orthogonal relationship to the sidewalls' as cited by claim 1, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). In this instant case, Carteau is relied upon for its teaching of a chassis (20) having discrete first and second midplane (25A, 25B), a shelf (30A, 30B) being disposed on at least one of the sidewalls, and a controller (29) mounted on the shelf (30A, 30B) and connected to the midplane (25A, 25B) as claimed. Carteau is not relied upon for a teaching or suggestion of the orientation of the midplanes. With respect to claims 2-6, which depend for claim 1, and are not patentable over Farchau et al. in view of Carteau for at least the same reason as claim 1.

Conclusion

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lisa Lea-Edmonds whose telephone number is 703-305-0265. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on 703-308-4815. The fax phone number for the organization where this application or proceeding is assigned is 703-305-3431.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-1782.

Lisa Lea-Edmonds
Primary Examiner
Art Unit 2835

